

**CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC**

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Gregory J. Fino, MD, FCCP

St. Clair Hospital  
1000 Bower Hill Road, Suite 211  
Pittsburgh, Pennsylvania 15243-1899

Telephone (412) 942-2025  
Fax (412) 942-2032  
Email gregory.fino@stclair.org

January 22, 2007

Michael C. Colville  
Assistant U.S. Attorney  
U.S. Department of Justice  
U.S. Post Office & Courthouse  
700 Grant Street  
Suite 4000  
Pittsburgh, PA 15219

**RE: Kenneth Hill v. United States**  
**C.A. No. 05-160E**  
**SSN: 579-92-9278**  
**DOB: 7/17/62**  
**OIME: 12/21/06**

Dear Attorney Colville:

I examined Mr. Hill on December 21, 2006.

**Patient Profile**

Mr. Hill was born in 1962 and was 44 years old. His medications included:

1. Medication for a rash; he has been on the medication for about a year, but it has not taken the problem away.
2. Cortisone cream for the rash.
3. Eye drops for burning and itchy eyes - this does help.
4. Breathing treatments about once a week - these work "so-so."

He has no allergies, and he never smoked.

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### **Occupational History**

Mr. Hill's job was making furniture from 2001 through 2005, and it was a very dusty job. He denied any skin problems, eye problems or lung problems before 2001. He believes he is about 30% better now that he is not working at the facility. While there, he cut Micore Board and particle board approximately three times per week. He did not have a respirator but was provided paper masks. He believed that the ventilation was not good. He had to use an air hose to remove the dust from his body and eye irrigation to wash out his eyes.

He was also exposed to Lokweld every day, and it created an odor. He also used a compound to remove extra Lokweld from the surfaces of the laminate.

He started to note dizziness, rash and shortness of breath within the first few months. He also developed severe headaches.

He now has shortness of breath, and he can no longer play basketball as he did in the past. He is limited in what he can do because of his breathing.

He does not complain of chest pain. He does admit to daily cough and mucus, and he does wheeze. There is no orthopnea or paroxysmal nocturnal dyspnea.

### **Past Medical History**

His past medical history is significant for a gunshot wound of the left leg.

He has no history of pneumonia, tuberculosis, emphysema, asthma, bronchitis, bronchiectasis, or frequent colds. There is no history of fractured ribs.

### **Family History**

There is no family history of malignancy.

### **Review of Systems**

Neurologic: No headaches or seizures

HEENT: No chronic sinus problems

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GI: No history of chronic gastrointestinal disease

CVS: No history of cardiovascular disease

GU: No chronic genitourinary problems

MS: No chronic musculoskeletal problems

Endocrine: No diabetes or thyroid disease

**Physical Examination**

General: Well-developed, well-nourished black man in no acute distress, oriented X 3

Heart Rate: 64

Blood Pressure: 122/82

Respiratory Rate: 12

Height: 73" without shoes

Weight: 223 lbs without shoes

Skin/Nails: No cyanosis, clubbing, or edema

Neck: Supple with a midline trachea; no thyromegaly

HEENT: Unremarkable. There was no conjunctivitis nor any evidence of external eye irritation.

Lungs: Clear to auscultation and percussion on a tidal volume breath and a forced expiratory maneuver without wheezes, rales, rhonchi, or rubs

Heart: Normal S1 and S2 without murmurs, gallops, or rubs

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Abdomen:	No organomegaly
Peripheral Pulses:	2+ and equal
Extremities:	Excoriations on his legs. A few papules (pimples) on his back and his abdomen.
Edema:	Negative
Neurological Exam:	Intact

### **Chest X-Ray**

A two-view chest x-ray was performed in conjunction with this examination. The chest x-rays were compared to the revised 2000 ILO classification films.

I have also received for review a Quality 1 two-view chest x-ray dated 10/18/04 performed by DBI Radiology, Inc. (according to the accompanying report), and I have compared this chest x-ray as well to the revised 2000 ILO classification films.

There were no pleural and no parenchymal abnormalities consistent with an occupationally acquired pneumoconiosis, and I classified both of the chest x-rays as 0/0.

Both of the above-referenced films were normal.

### **Pulmonary Function Testing**

The American Thoracic Society, in conjunction with the European Respiratory Society, has published a follow-up article to their 1991 article on selection of reference values and interpretative strategies in pulmonary function testing.

The original 1991 article is entitled Lung Function Testing: Selection of Reference Values And Interpretative Strategies (AM REV RESPIR DIS 1991; 144:1202-1218). The more recent article is entitled Interpretative Strategies for Lung Function Tests (EUR RESPIR J 2005; 26:948-968).

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The following consensus recommendations have been issued in the 2005 consensus statement:

- ✓ If the patient's age or height is outside the limits of the reference population, a statement in the interpretation should indicate that an extrapolation has been made.
- ✓ The practice of using 80% as a fixed value for the lower limit of normal can lead to important errors when interpreting lung function in adults. The practice of using 0.70 as a lower limit of the FEV1/FVC ratio results in a significant number of false positive results in males aged greater than 40 years and females greater than 50 years, as well as in a risk of over diagnosis of chronic obstructive pulmonary disease in asymptomatic elderly never smokers.
- ✓ Volume corrections should be made for African-Americans and Hispanics when measuring spirometry. Values for lung volumes are, on average, 12% lower in African-Americans than in Caucasians.
- ✓ Recommended spirometric reference equations come from the National Health and Nutrition Examination Survey (NHANES III) published in 1999 (**AM J RESPIR CRIT CARE MED** 1999; 159:179-187).
- ✓ Recommended lung volume reference equations were published in 1995 (**EUR RESPIR J** 1995; 8:492-506).
- ✓ A single set of diffusing capacity reference values could not be recommended. There were two commonly used equations referenced, one of which has been utilized since its publication in 1981 (**AM REV RESPIR DIS**; 123:185-189).

The earlier consensus statement also recommended abandoning the 80% cut off as normal and the 70% cut off for the FEV1/FVC. The new 2005 statement paper goes one step further and has recommended utilization of one set of reference equations for spirometry, one for lung volumes and then one of two for the diffusing capacity. Having reviewed these new recommendations and having reviewed the source material, I believe that it is medically reasonable to follow the recommendations in the statement papers.

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I have included with the pulmonary function studies that are performed in conjunction with my examinations a new summary for the spirometry, lung volumes and diffusing capacity. This summary utilizes the above noted recommendations for the spirometry, lung volume and diffusing capacity reference equations.

### **Spirometry**

The spirometry was invalid because of a premature termination to exhalation and a lack of reproducibility in the expiratory tracings. There was also a lack of an abrupt onset to exhalation. The values recorded for this spirometry represent at least the minimal lung function that this man could perform and certainly not this man's maximum lung function. (References: (1) Standardization of Spirometry. *A.R.R.D.* 1987; 136:1285-1298. (2) ATS Statement-Snowbird Workshop on Standardization of Spirometry. *A.R.R.D.* 1979; 119:831-838. (3) Statement on Spirometry. *Chest* 1983; 83:547-550. (4) ATS/ERS Task Force: Standardization of Lung Function Testing - Standardization of Spirometry. *Eur Respir J* 2005; 26: 319-338.)

### **Lung Volumes**

The TLC was normal. The RV and RV/TLC were elevated.

### **Diffusing Capacity**

The diffusing capacity was normal.

### **Oxygen Saturation**

Normal

### **Carboxyhemoglobin Level**

Normal

### **Laboratory Results**

Liver function studies, renal studies, electrolytes, and a CBC were all normal.

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### **Medical Record Review**

In conjunction with this evaluation, I reviewed the following information:

1. Background information which included:
  - The Microbac Indoor Airy Quality Survey dated 7/31/01.
  - The Declaration of Michael Salerno, dated 1/19/05, with detailed information regarding the ventilation system.
  - The McKean timeline, which identified when and where the Plaintiff worked within the UNICOR Factory.
  - Material Safety Data Sheets for Micore Board and Lokweld.
  - The OSHA Inspection Report and supporting documentation.

Micore Board is a man-made product which contains man-made vitreous fiber, expanded perlite, starch, recycled paper, kaolin and crystalline silica.

Lokweld is a sprayed grade adhesive used for laminate. It contains acetone, toluene, hexane isomers, and N-hexane.

In a letter dated August 20, 2003, Mr. Stranahan (from OSHA) discussed the results of air monitoring to evaluate worker exposures to airborne dust concentrations. He stated that the "results show that no worker's exposure exceeded 10% of the relevant exposure limit." He did recommend a number of steps that could be voluntarily taken to eliminate or further reduce the workers' exposure to dust. The OSHA study found no respirable silica.

2. A copy of the Amended Complaint filed on behalf of the Plaintiff.
3. The Declaration of Stephen Housler, Safety Manager, dated 1/25/05.
4. The Declaration of Martin Sapko, Factory Manager, dated 1/25/06.

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5. The Declaration of Douglas S. Goldring, Assistant General Counsel, dated 2/2/06, including an attachment identified as a true and correct copy of the Plaintiff's medical records through January 2006.
6. The Plaintiff's Affidavit dated 3/13/06.
7. The deposition transcript of Kenny Hill dated 11/1/06.
8. In addition to the information noted above, I also had an opportunity to review miscellaneous records on CD ROMS that accompanied the files forwarded to my office.

### **Diagnoses**

I have reached the following diagnoses:

1. Normal Pulmonary Examination
2. History of a rash and irritation of the eyes

### **Discussion**

I find no evidence of a respiratory impairment or disability. This man did not give a maximum effort on the spirometry. The values for the FVC and FEV1 underestimate his true lung function. If this man really had values that low, he would no doubt require oxygen and would not be able to ambulate more than 50 feet. Certainly, historically, he does not have symptoms comparable to the lung function studies; therefore, this is another reason why the lung function studies for the FVC and FEV1 underestimate his true lung function. However, I would also point out that the diffusing capacity was normal, indicating no scarring or fibrosis of the lungs and no difficulty transferring oxygen from the air sacs to the bloodstream with exertion.

The determination of pulmonary impairment and subsequent disability has been extensively researched in the American medical literature. In the late 1980s, there was a worldwide conference on the assessment of respiratory impairment sponsored by the National Institutes of Health. This was published in the American Review of Respiratory Disease in 1988 (ARRD 1988; 137:1505-1510). All of the participants agreed that symptoms of shortness of breath on effort and exercise intolerance were not reliable predictors of impairment. There was also agreement that a physical examination was not



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helpful in measuring pulmonary impairment. Lung function tests, however, were essential in assessing whether or not impairment was present and essential in rating its severity. Dr. Hans Weill commented that "resting lung function tests, usually spirometry, all are the cornerstone in the clinician's assessment of respiratory impairment, and provided they are technically sound, are generally believed to be adequate for ascertaining the presence of respiratory limitation. Likewise, it is generally believed that exercise limitation is not likely to be present in the face of normal or marginal resting lung function."

Similar statements have been issued by the American Thoracic Society and the American Medical Association with respect to guidelines for the evaluation of respiratory impairment. It is of utmost importance that valid lung function studies be performed. An invalid study does not represent the patient's maximum pulmonary capacity and cannot be used to assess impairment or disability. An invalid pulmonary function study indicates poor patient effort. The values recorded can only represent the minimum lung function of the patient.

There is no evidence of either chronic or accelerated silicosis based on the normal chest films.

This patient should have no fear of contracting silicosis in the future. First of all, there were no measurable levels of respirable silica noted by OSHA. Furthermore, it is well documented in the medical literature that at least 20 years of exposure to dust that is measurable and above the PEL is required before chronic silicosis occurs.

If this were my patient, I would not follow him for the subsequent development of silicosis, and I would assure him that he has no reason to worry about developing silicosis in the future.

I find no evidence of any chronic condition with reference to his eyes or throat or skin. Although he has complaints referable to these systems, I find no objective evidence of any abnormality.

From a respiratory standpoint, I do not find any objective evidence of any respiratory impairment or disease process of the pulmonary system. He did not give a maximum effort on the spirometry. However, the TLC and the diffusing capacity were normal.

He has numerous complaints regarding a rash and eye irritation. Of course, dermatology and ophthalmology are not my specialties. He states that there was a lot of dust where he

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worked. Certainly he may have sustained some irritation of the skin and the eyes as a result of the dusts. However, I found no evidence of any eye irritation at the time I examined him.

There were excoriations on his legs which suggest itching. However, I found no evidence that this was related to his exposures at work.

Based on the objective evidence that I have reviewed, I do not find any objective evidence of a respiratory impairment or any pulmonary illness related to his work exposures.

### **Conclusions**

My conclusions have been reached with a reasonable degree of medical certainty. I find no evidence of any chronic condition of the lungs or pulmonary system related to Mr. Hill's alleged exposures. I find no evidence of a chronic condition with reference to the skin, eyes or nose.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory J. Fino". The signature is fluid and cursive, with a long horizontal stroke at the end.

Gregory J. Fino, M.D., F.C.C.P.

GJF/kms

**CLINICAL AND OCCUPATIONAL PULMONARY ASSOCIATES****GREGORY J. FINO, M.D., F.C.C.P.****PREDICTED VALUES BASED ON THE 2005 SPIROMETRY RECOMMENDATIONS****Recommendations from the ATS/ERS : INTERPRETATIVE STRATEGIES FOR  
LUNG FUNCTION TESTS EUR RESPIR J 2005; 26:948-968.**

<b>Name</b>	Hill, Kenneth		<b>MD</b>	Fino
<b>Ht</b>	185.4	cm	<b>Date</b>	12/21/2006
<b>Age</b>	44	years	<b>Race</b>	African American

**SPIROMETRY PREDICTED VALUES USING THE NHANES III STUDY****Spirometric Reference Values from a Sample of the General U.S. Population****AM J RESPIR CRIT CARE MED 1999; 159:179-187**

TEST	PATIENT	PRED	%PRED	LLN	LLN%	POST	%PRED	BD %
FVC	3.82	4.77	80	3.75	79	3.97	83	4
FEV1	1.31	3.86	34	2.96	77	1.87	48	43
FEV1/FVC	34	81		71		47		
FEF25-75	0.98	3.88	25	1.94	50	1.54	40	57

**REFERENCE VALUES FOR RV,FRC AND TLC - ATS WORKSHOP ON LUNG VOLUME  
MEASUREMENTS OFFICIAL STATEMENT OF THE EUROPEAN RESPIRATORY SOCIETY****EUR RESPIR J 1995; 8:492-506**

L.V.	PATIENT	PRED	%PRED	LLN	LLN%	ULN	ULN%
TLC	6.69	6.81	98	5.60	82	9.10	134
RV	2.99	1.91	157	1.32	69	2.84	149
FRC	3.71	3.25	114	2.37	73	4.68	144
RV/TLC%	45	31	144	20	66	42	134

**STANDARDIZED SINGLE BREATH NORMAL VALUES FOR THE DLCO****AM REV RESPIR DIS 1981;123:185-189**

DLCO	PATIENT	PRED	%PRED	LLN	LLN%
DLCO	29.49	36.21	81	29.00	80
DL/VA	5.21	4.91	106	3.68	75

**Prebronchodilator**FVC  
FEV1  
FEV1/FVC  
FEF25-75**Post Bronchodilator**FVC  
FEV1**Lung Volumes**FRC  
TLC  
RV  
RV/TLC**Diffusing Capacity**DLCO  
DL/VA**IMPRESSION**

PRE		POST	
FVC	3.82	FVC	3.97
FEV1	1.31	FEV1	1.87
FEV1/FVC	34	FEF25-75	1.54
FEF25-75	0.98	PRE	
TLC	6.69	RV/TLC%	45
RV	2.99	DLCO	29.49
FRC	3.71	DL/VA	5.21

Gregory J. Fino, M.D.

**St. Clair Hospital**  
**Pulmonary Function Report**  
 1000 Bower Hill Rd.  
 Pittsburgh, PA, 15243

Phone: 412-942-2000 Fax: 412-942-2024

Name: Hill, Kenny	ID: 88-14-20	D.O.B.: 07/17/1962	Date: 12/21/2006
Tech: Diane Smith, CRT	Height: 73.00	Age: 44	Room: Outpatient
Doctor: G. Fino, M.D.	Weight: 223.00	Sex: Male	Race: Black

Diagnosis: S.O.B.

Dyspnea: After severe exertion

Cough: Productive

Wheeze: Frequent

Tbco Prod: Never Smoked

Yrs Smk:

Pks/Day:

Yrs Quit:

Medications:

Pre Test Comments:

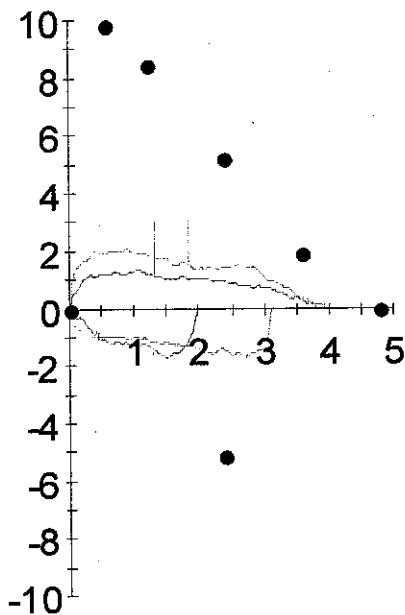
Post Test Comments: Good patient effort and cooperation. Patient met ATS standards. Albuterol MDI 2 puffs given PFT Authors DLCO (Crapo), FVC (Nhanes III), FRC (ECCS)

	Pre-Bronch			Post-Bronch		
	<u>Actual</u>	<u>Pred</u>	<u>%Pred</u>	<u>Actual</u>	<u>%Pred</u>	<u>%Chng</u>
---- SPIROMETRY ----						
FVC (L)	3.82	4.77	80	3.97	83	4
FEV1 (L)	1.31	3.86	34	1.87	48	43
FEV1/FVC (%)	34	81	42	47	58	38
FEF 25% (L/sec)	1.27	8.50	15	2.00	24	58
FEF 75% (L/sec)	0.69	1.93	36	1.41	73	106
FEF 25-75% (L/sec)	0.98	3.88	25	1.54	40	58
FEF Max (L/sec)	1.33	9.83	14	2.12	22	59
FIVC (L)	1.97			3.12		58
FIF Max (L/sec)	1.72			1.71		-1
---- LUNG VOLUMES ----						
SVC (L)	3.70	5.47	68			
IC (L)	2.98	3.69	81			
ERV (L)	0.72	1.78	41			
FRC (N2) (L)	3.71	3.86	96			
RV (N2) (L)	2.99	2.08	144			
TLC (N2) (L)	6.69	7.55	89			
RV/TLC (N2) (%)	45	28	159			
Washout Time (min)	1.25					
---- DIFFUSION ----						
DLCOunc (ml/min/mmHg)	29.49	36.37	81			
DLCOcor (ml/min/mmHg)		40.47				
DL/VA (ml/min/mmHg/L)	5.21	6.20	84			
VA (L)	5.66	7.55	75			
IVC (L)	3.55					
BHT (sec)						

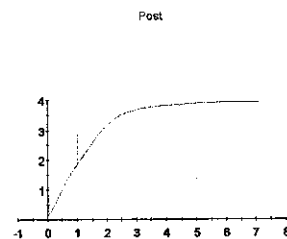
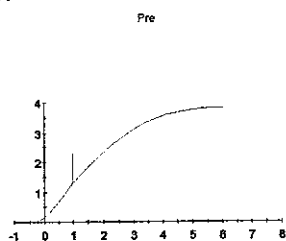
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**Pulmonary Function Report**  
1000 Bower Hill Rd.  
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Phone: 412-942-2000 Fax: 412-942-2024

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Tech: Diane Smith, CRT	Height: 73.00	Age: 44	Room: Outpatient
Doctor: G. Fino, M.D.	Weight: 223.00	Sex: Male	Race: Black



● Pred      — Pre      - - - Post



# **St. Clair Hospital** **Pulmonary Function Report**

1000 Bower Hill Rd.

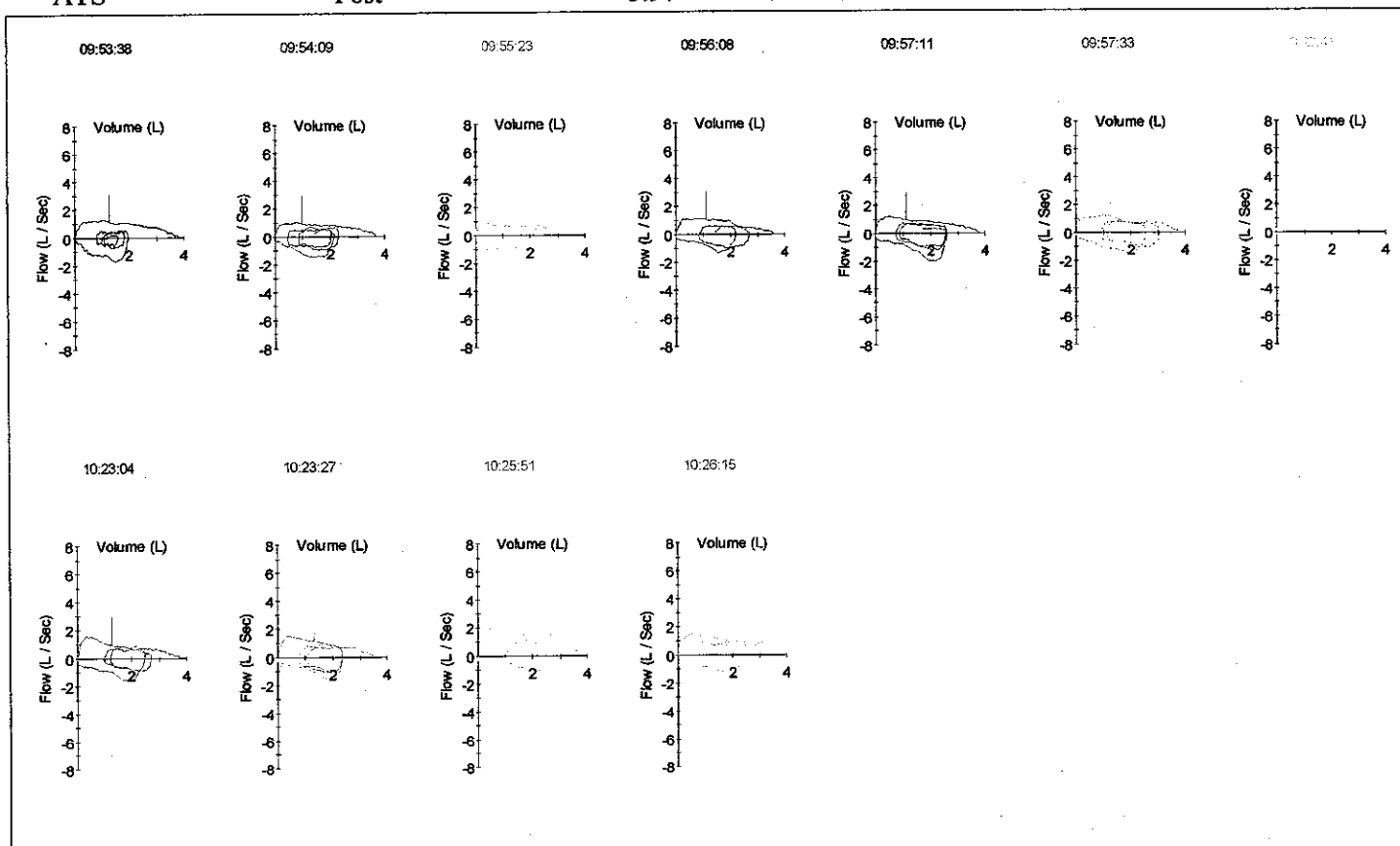
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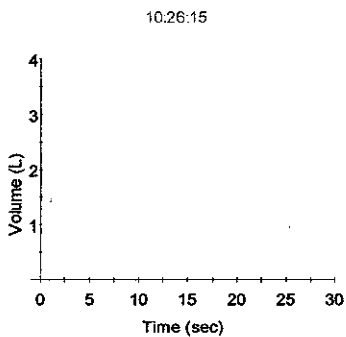
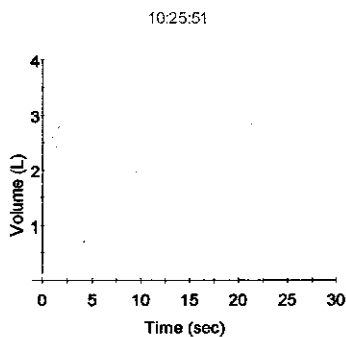
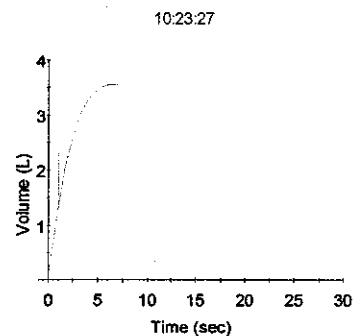
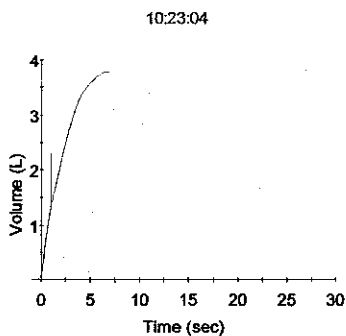
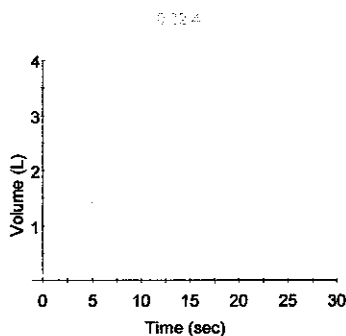
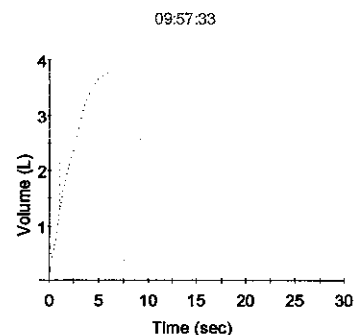
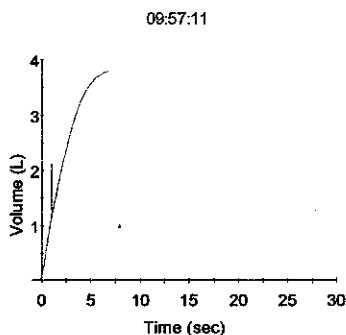
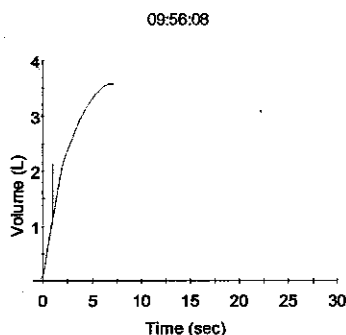
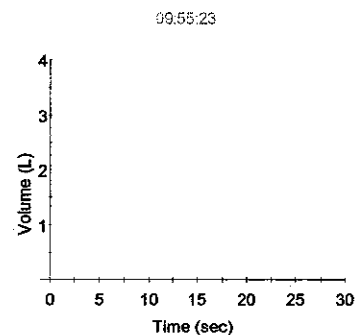
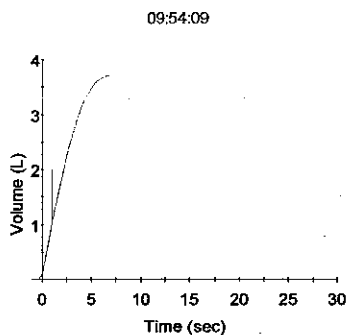
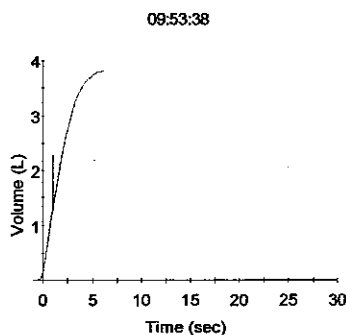
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<b>Pre</b>										
09:53:38	*				3.81	80	1.31	34	34	0.98
09:57:33	*				3.82	80	1.25	32	33	0.81
09:57:11	*				3.78	79	1.14	29	30	0.79
09:56:08	*				3.59	75	1.13	29	32	0.75
09:54:09	*				3.69	77	1.01	26	27	0.76
09:55:23	*				3.73	78	0.89	23	24	0.64
ATS			Pre/Baseline		3.82	80	1.31	34	34	0.98
<b>Post</b>										
10:25:51	*				3.94	+3	1.87	+43	48	1.54
10:26:15	*				3.97	+4	1.36	+4	34	0.96
10:22:41	*				3.38	-12	1.73	+32	51	0.88
10:23:04	*				3.78	-1	1.31	+0	35	0.78
10:23:27	*				3.55	-7	1.35	+3	38	0.84
ATS			Post		3.97	+4	1.87	+43	47	1.54



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Time Select RpLp Test Mode Codes Protocol

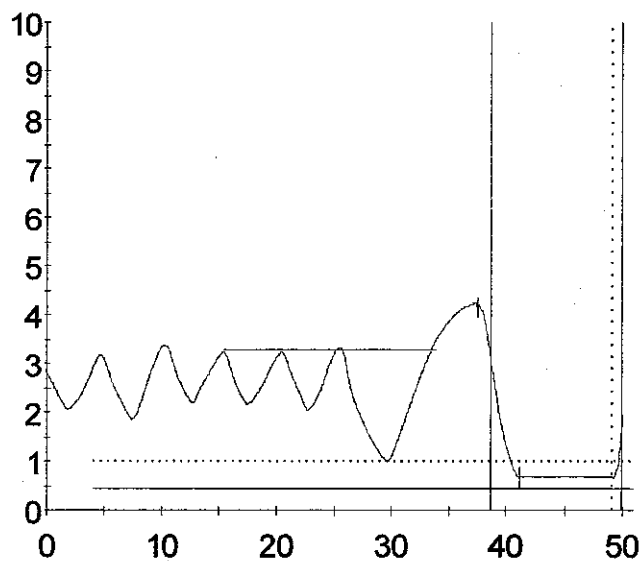
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<b>absolute</b>	<b>% p/c</b>	<b>absolute</b>	<b>% p/c</b>	<b>absolute</b>
Predicted	36.37	40.47		6.20

**Pre**

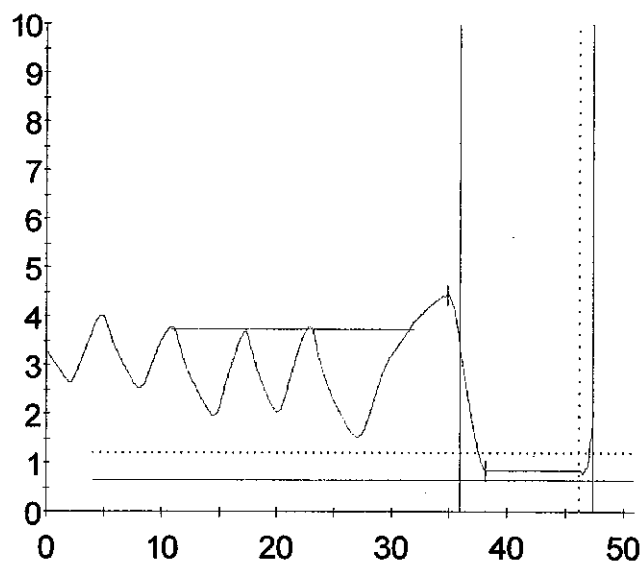
10:12:29		Breath	Jones-Mea	27.85	77	5.09
10:15:44	*		Jones-Mea	28.47	78	5.25
10:18:37	*		Jones-Mea	30.52	84	5.18
AVG		Pre/Baseline		29.49	81	5.21

**Post**

10:15:44



10:18:37





**St. Clair Hospital****Pulmonary Function Report**

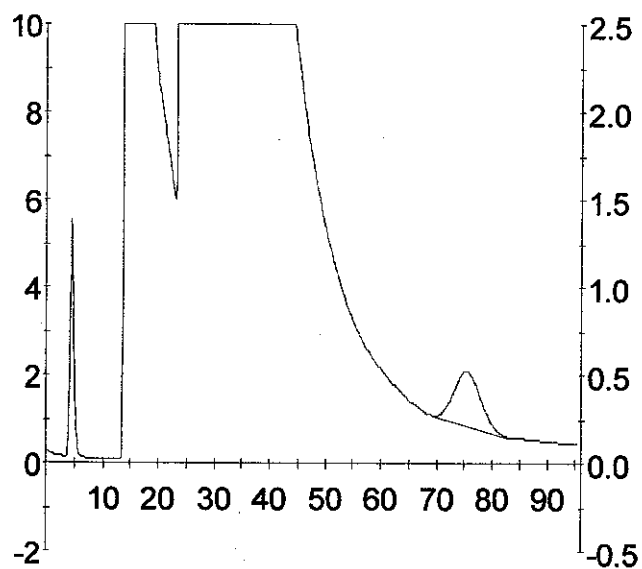
1000 Bower Hill Rd.

Pittsburgh, PA, 15243

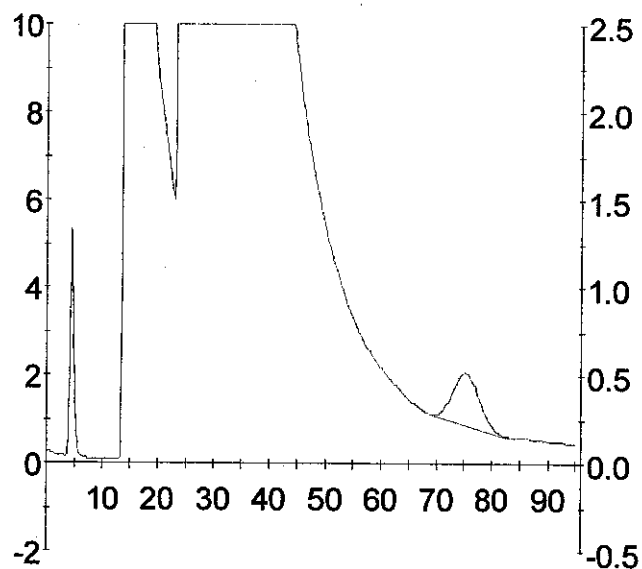
Phone: 412-942-2000 Fax: 412-942-2024

Name: Hill, Kenny	ID: 88-14-20	D.O.B.: 07/17/1962	Date: 12/21/2006
Tech: Diane Smith, CRT	Height: 73.00	Age: 44	Room: Outpatient
Doctor: G. Fino, M.D.	Weight: 223.00	Sex: Male	Race: Black

10:15:44



10:18:37



**St. Clair Hospital****Pulmonary Function Report**

1000 Bower Hill Rd.

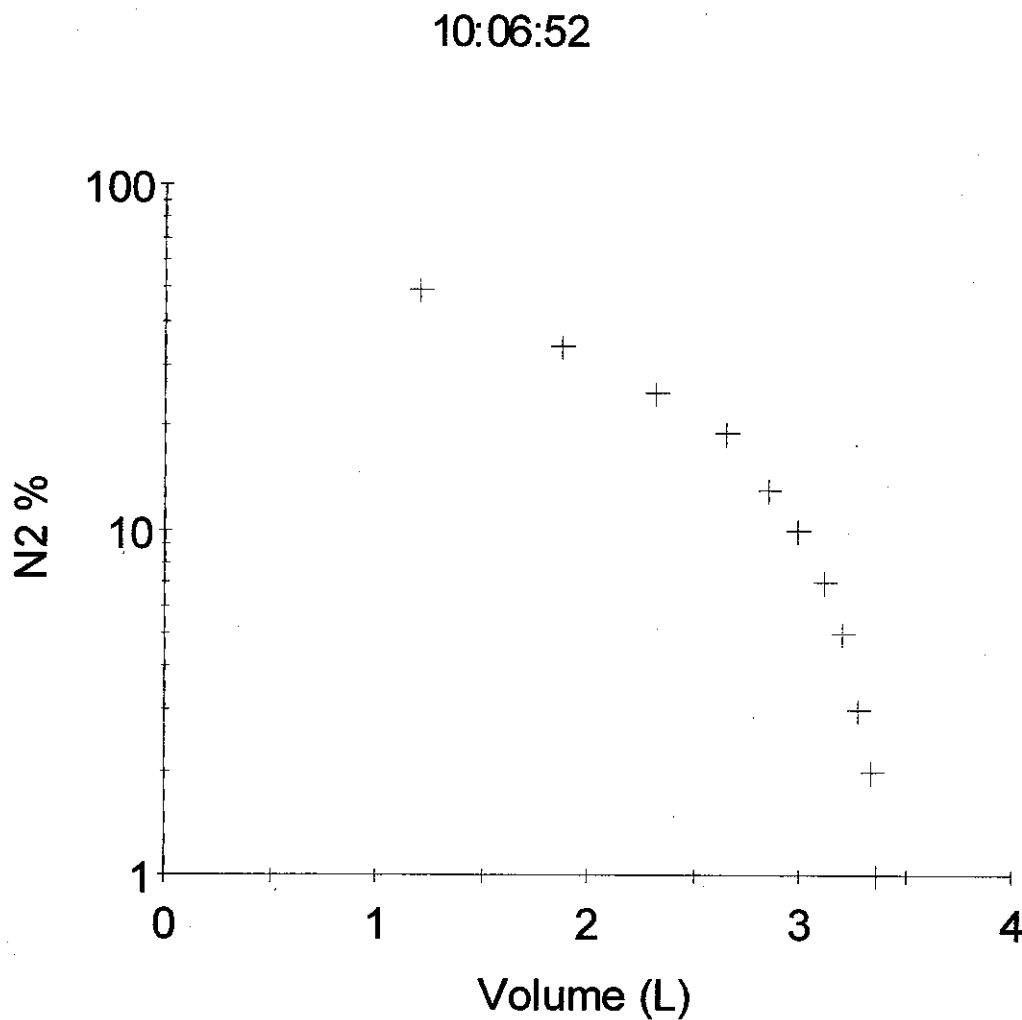
Pittsburgh, PA, 15243

Phone: 412-942-2000

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Name: Hill, Kenny	ID: 88-14-20	D.O.B.: 07/17/1962	Date: 12/21/2006
Tech: Diane Smith, CRT	Height: 73.00	Age: 44	Room: Outpatient
Doctor: G. Fino, M.D.	Weight: 223.00	Sex: Male	Race: Black

Time	Select	RpLp	Test Mode	FRC (N2) absolute	FRC (N2) % p/c	RV (N2) absolute	RV (N2) % p/c	TLC (N2) absolute
Predicted				3.86		2.08		7.55
Pre								
10:03:01				3.06	79	2.34	113	6.04
10:06:52	*			3.71	96	2.99	144	6.69
AVG			Pre/Baseline	3.71	96	2.99	144	6.69
Post								



HILL, KENNETH

MR#:881420 SEX:M AGE:44Y BIRTH:07/17/1962

DOCTOR:FINO, GREGORY J., M.D.

1000 BOWER HILL RD. SUITE 211  
PITTSBURGH PA 15243ST CLAIR HOSPITAL LABORATORY  
1000 BOWER HILL ROAD  
PITTSBURGH, PA 15243

MARTHA R. CLARKE, MD, MEDICAL DIRECTOR

===== PHYSICIAN COPY FOR DR: FINO, GREGORY J., M.D. =====

H6663 COLL: 12/21/2006 10:50 REC: 12/21/2006 10:53

## COMP METABOLIC

SGOT/AST	33	[0-50]	U/L
SGPT/ALT	45	[0-50]	U/L
ALKALINE PHOSPHAT	85	[43-122]	U/L
BILIRUBIN TOTAL	1.2	[0.2-1.3]	MG/DL
PROTEIN	@8.5	[6.0-8.4]	G/DL
ALBUMIN	4.5	[3.5-5.0]	G/DL
CALCIUM	10.0	[8.0-10.2]	MG/DL
GLUCOSE	93	[70-110]	MG/DL
BUN	8	[8-25]	MG/DL
CREATININE	1.0	[0.6-1.5]	MG/DL
GFR (CAUCAS/OTHER)	>59	[>59]	ML/MIN
GFR (AFRICAN AMER)	>59	[>59]	ML/MIN
SODIUM	139	[133-145]	MMOL/L
POTASSIUM	4.2	[3.5-5.0]	MMOL/L
CHLORIDE	103	[96-108]	MMOL/L
CO2	27	[22-30]	MMOL/L
ANION GAP	9	[8-16]	MMOL/L

## CBC HEMOGRAM

WBC	5.6	[4.8-10.8]	K/UL
RBC	5.40	[4.7-6.2]	M/UL
HEMOGLOBIN	16.1	[14.0-17.0]	GM/DL
HEMATOCRIT	46.3	[42.0-52.0]	%
MCV	85.7	[78.0-94.0]	FL
MCH	29.8	[25.0-35.0]	PG
MCHC	34.8	[31.0-36.5]	G/DL
RDW	13.6	[12.9-14.9]	%
PLATELET	260	[130-460]	K/UL
MPV	@6.8	[7.4-10.4]	FL

## DIFF, ELECTRONIC

ABSOLUTE NEUTROPH	3.1	[1.5-6.6]	K/UL
ABSOLUTE LYMPHOCY	2.2	[1.5-3.5]	K/UL
ABSOLUTE MONOCYTE	0.3	[0-0.9]	K/UL
ABSOLUTE EOSINOPH	0.1	[0-0.6]	K/UL
ABSOLUTE BASOPHIL	0.0	[0-0.1]	K/UL
NEUTROPHIL	55.8	[40-75]	%
LYMPHOCYTE	36.4	[20-40]	%
MONOCYTE	5.8	[1-8]	%
EOSINOPHIL	1.5	[0-5]	%
BASOPHIL	0.5	[0-1]	%

PAGE:1

FINO, GREGORY J., M.D.  
1000 BOWER HILL RD. SUITE 211  
PITTSBURGH PA 152431TIME  
\* = CRITICAL VALUE  
@ = OUTSIDE NORMAL RANGE  
END OF REPORT

CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC

Gregory J. Fino, MD, FCCP

St. Clair Hospital  
1000 Bower Hill Road, Suite 211  
Pittsburgh, Pennsylvania 15243-1899

Telephone (412) 942-2025  
Fax (412) 942-2032  
Email gregory.fino@stclair.org

PATIENT HILL, KENNETH

DATE 12-31-06

PULSE OXIMETRY

97% BA

CC = 3 ppm

0.0 COHb

**CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC**

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Gregory J. Fino, MD, FCCP

Telephone (412) 942-2025  
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Email gregory.fino@stclair.org

January 22, 2007

Michael C. Colville  
Assistant U.S. Attorney  
U.S. Department of Justice  
U.S. Post Office & Courthouse  
700 Grant Street, Suite 4000  
Pittsburgh, PA 15219

**RE: Michael Hill v. United States**  
**C.A. No.03-323E**  
**SSN: 579-80-4585**  
**DOB: 4-30-57**  
**OIME: 1/3/07**

Dear Attorney Colville:

I examined Mr. Hill on January 3, 2007.

**Patient Profile**

Mr. Hill was born in 1957 and is 49 years old.

His medications included:

1. Cozaar
2. Flomax
3. Nifedipine
4. Aspirin - 1 low dose per day
5. Flexeril

He has used breathing medications off and on in the past. The last time was in 2005. It was apparently some type of inhaler.

Michael Hill  
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He smoked off and on at the rate of no more than 10 cigarettes per day and continued this habit over a 4 year span (1995 until 1999).

### **Occupational History**

Mr. Hill worked for Unicor from August of 2002 until November of 2003. He helped cut Micore Board for the entire time he worked there. He said he was fired from that job because he complained about the work environment. He stated that the ventilation was not good, and he was offered a paper mask but not a respirator. He was also exposed to wood dust when he cut the particle board and to Lokweld, a glue used at Unicor.

Prior to 2002, he had no breathing problems. He did have some hay fever and post nasal drip. Early on in his work, he noted nasal congestion and some vertigo. He was diagnosed as having rhinitis. He did develop shortness of breath while he was working, and since leaving Unicor he is back to normal except that he does not have the stamina for running as he did before. When he was working, he noted a number of rashes and a lot of itching. He occasionally gets chest pain and he has had a few EKGs.

After the Micore board was removed from Unicor, Mr. Hill continued to have shortness of breath and a tightness in his chest; the chest tightness can occur at rest and with exertion.

He has a dry cough with little mucous production. He does wheeze.

He is also worried about developing silicosis down the road.

He notes that his hands and feet get numb, which he did not experience prior to 2002. He also has seen a rheumatologist, and he has a positive ANA, RNP and SSA.

He has had Raynaud's syndrome since 2004.

There is no orthopnea or paroxysmal nocturnal dyspnea.

### **Past Medical History**

1. Hospitalized for broken left wrist - in the 1960s; surgery was performed
2. Hospitalized for Hepatitis A - about 1979

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3. Right shoulder surgery - 2001
4. History of nephropathy, and he is positive for some type of connective tissue disorder
5. Has been on breathing medications in the past - unsure of diagnosis
6. History of headaches "off and on"
7. History of sinus problems - 2002 until 2004
8. As noted above, there is a history of Raynaud's disease; he has numbness in his hands and feet that is currently being evaluated by a rheumatologist.
9. Recently treated for Hepatitis C
10. On crutches at this time - left foot injury

He has no history of pneumonia, tuberculosis, emphysema, asthma, bronchitis, bronchiectasis, or frequent colds. There is no history of fractured ribs.

### **Family History**

There is no reported family history of lung disease, heart disease, or malignancy.

### **Review of Systems**

Neurologic:	No seizures
GI:	No history of chronic gastrointestinal disease
CVS:	No history of cardiovascular disease
Endocrine:	No diabetes or thyroid disease

### **Physical Examination**

General:	Well-developed, well-nourished African American in no acute distress, oriented X 3
Heart Rate:	68
Blood Pressure:	121/76

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Respiratory Rate:	12
Height:	68" without shoes
Weight:	170 lbs without shoes
Skin/Nails:	No cyanosis, clubbing, or edema
Neck:	Supple with a midline trachea; no thyromegaly
HEENT:	Unremarkable
Lungs:	Clear to auscultation and percussion on a tidal volume breath and a forced expiratory maneuver without wheezes, rales, rhonchi, or rubs
Heart:	Normal S1 and S2 without murmurs, gallops, or rubs
Abdomen:	No organomegaly
Peripheral Pulses:	2+ and equal
Extremities:	Cyanosis and erythema of the hands - consistent with Raynaud's
Edema:	Negative
Neurological Exam:	Intact

### **Chest X-Ray**

A two-view chest x-ray was performed in conjunction with this examination. The chest x-rays were compared to the revised 2000 ILO classification films.



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There were no pleural and no parenchymal abnormalities consistent with an occupationally acquired pneumoconiosis.

Classification: 0/0

### **Pulmonary Function Testing**

The American Thoracic Society, in conjunction with the European Respiratory Society, has published a follow-up article to their 1991 article on selection of reference values and interpretative strategies in pulmonary function testing.

The original 1991 article is entitled Lung Function Testing: Selection of Reference Values And Interpretative Strategies (AM REV RESPIR DIS 1991; 144:1202-1218). The more recent article is entitled Interpretative Strategies for Lung Function Tests (EUR RESPIR J 2005; 26:948-968).

The following consensus recommendations have been issued in the 2005 consensus statement:

- ✓ If the patient's age or height is outside the limits of the reference population, a statement in the interpretation should indicate that an extrapolation has been made.
- ✓ The practice of using 80% as a fixed value for the lower limit of normal can lead to important errors when interpreting lung function in adults. The practice of using 0.70 as a lower limit of the FEV1/FVC ratio results in a significant number of false positive results in males aged greater than 40 years and females greater than 50 years, as well as in a risk of over diagnosis of chronic obstructive pulmonary disease in asymptomatic elderly never smokers.
- ✓ Volume corrections should be made for African-Americans and Hispanics when measuring spirometry. Values for lung volumes are, on average, 12% lower in African-Americans than in Caucasians.
- ✓ Recommended spirometric reference equations come from the National Health and Nutrition Examination Survey (NHANES III) published in 1999 (AM J RESPIR CRIT CARE MED 1999; 159:179-187).

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January 22, 2007

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- ✓ Recommended lung volume reference equations were published in 1995 (EUR RESPIR J 1995; 8:492-506).
- ✓ A single set of diffusing capacity reference values could not be recommended. There were two commonly used equations referenced, one of which has been utilized since its publication in 1981 (AM REV RESPIR DIS; 123:185-189).

The earlier consensus statement also recommended abandoning the 80% cut off as normal and the 70% cut off for the FEV1/FVC. The new 2005 statement paper goes one step further and has recommended utilization of one set of reference equations for spirometry, one for lung volumes and then one of two for the diffusing capacity. Having reviewed these new recommendations and having reviewed the source material, I believe that it is medically reasonable to follow the recommendations in the statement papers.

I have included with the pulmonary function studies that are performed in conjunction with my examinations a new summary for the spirometry, lung volumes and diffusing capacity. This summary utilizes the above noted recommendations for the spirometry, lung volume and diffusing capacity reference equations.

### **Spirometry**

The spirometry was invalid because of a premature termination to exhalation and a lack of reproducibility in the expiratory tracings. There was also a lack of an abrupt onset to exhalation. The values recorded for this spirometry represent at least the minimal lung function that this man could perform and certainly not this man's maximum lung function. (References: (1) Standardization of Spirometry. *A.R.R.D.* 1987; 136:1285-1298. (2) ATS Statement-Snowbird Workshop on Standardization of Spirometry. *A.R.R.D.* 1979; 119:831-838. (3) Statement on Spirometry. *Chest* 1983; 83:547-550. (4) ATS/ERS Task Force: Standardization of Lung Function Testing - Standardization of Spirometry. *Eur Respir J* 2005; 26: 319-338.)

### **Lung Volumes**

Normal FRC and RV.

Michael Hill  
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### **Diffusing Capacity**

Mr. Hill was unable to complete DLCO testing.

### **Oxygen Saturation**

Normal

### **Carboxyhemoglobin Level**

Normal

### **Laboratory Results**

Liver function and renal function studies were normal, and electrolytes were normal. There was a decrease in this man's white blood cell count and in his hemoglobin/hematocrit.

### **Medical Record Review**

In conjunction with this evaluation, I also reviewed the following information:

1. Background information which included:
  - The Microbac Indoor Air Quality Survey dated 7/31/01.
  - The Declaration of Michael Salerno, dated 1/19/05, with detailed information regarding the ventilation system.
  - The McKean timeline, which identified when and where the Plaintiff worked within the UNICOR Factory.
  - Material Safety Data Sheets for Micore Board and Lokweld.
  - The OSHA Inspection Report and supporting documentation.

Micore Board is a man-made product which contains man-made vitreous fiber, expanded perlite, starch, recycled paper, kaolin and crystalline silica.

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Lokweld is a sprayed grade adhesive used for laminate. It contains acetone, toluene, hexane isomers, and N-hexane.

In a letter dated August 20, 2003, Mr. Stranahan (from OSHA) discussed the results of air monitoring to evaluate worker exposures to airborne dust concentrations. He stated that the "results showed no worker's exposure exceeded 10% of the relevant exposure limit." He did recommend a number of steps that could be voluntarily taken to eliminate or further reduce the workers' exposure to dust. No respirable silica was measured.

2. A copy of the Fifth Amended Complaint filed on behalf of the Plaintiff.
3. The Declaration of Doris M. Williams, M.D., dated 4/20/04.
4. The Declaration of Stephen Housler, Safety Manager, dated 1/25/06.
5. The Declarations of Martin Sapko, Factory Manager, dated 1/25/06.
6. The Declaration of Debora Forsyth, Associate Warden, dated 1/30/06.
7. The Declaration of Douglas S. Goldring, Assistant General Counsel, dated 2/9/06, which included information from the Bureau of Corrections' medical file on Mr. Hill with notations between January of 2000 and January of 2006.
8. A transcript of the video deposition of Michael Hill dated 11/1/06.
9. In addition to the information noted above, I also had an opportunity to review miscellaneous records on CD ROMS that accompanied the files forwarded to my office.

Included in the medical records noted above were rheumatology evaluations. I would note that there was a history of Raynaud's phenomenon, hepatitis C, a positive RNP antibody and a low complement level.

#### **Diagnoses**

1. Normal Pulmonary Examination
2. Probable connective tissue disease and hepatitis C

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### **Discussion**

I found no evidence of a respiratory impairment or disability. This man's spirometry was invalid. When lung volumes were performed, the TLC and RV/TLC were also invalid, while the FRC and RV were normal.

The determination of pulmonary impairment and subsequent disability has been extensively researched in the American medical literature. In the late 1980s, there was a worldwide conference on the assessment of respiratory impairment sponsored by the National Institutes of Health. This was published in the American Review of Respiratory Disease in 1988 (ARRD 1988; 137:1505-1510). All of the participants agreed that symptoms of shortness of breath on effort and exercise intolerance were not reliable predictors of impairment. There was also agreement that a physical examination was not helpful in measuring pulmonary impairment. Lung function tests, however, were essential in assessing whether or not impairment was present and essential in rating its severity. Dr. Hans Weill commented that "resting lung function tests, usually spirometry, all are the cornerstone in the clinician's assessment of respiratory impairment, and provided they are technically sound, are generally believed to be adequate for ascertaining the presence of respiratory limitation. Likewise, it is generally believed that exercise limitation is not likely to be present in the face of normal or marginal resting lung function."

Similar statements have been issued by the American Thoracic Society and the American Medical Association with respect to guidelines for the evaluation of respiratory impairment. It is of utmost importance that valid lung function studies be performed. An invalid study does not represent the patient's maximum pulmonary capacity and cannot be used to assess impairment or disability. An invalid pulmonary function study indicates poor patient effort. The values recorded can only represent the minimum lung function of the patient.

There is no evidence of either chronic or accelerated silicosis based on the normal chest films.

This patient should have no fear of contracting silicosis in the future. First of all, there were no measurable levels of respirable silica noted by OSHA. Furthermore, it is well documented in the medical literature that at least 20 years of exposure to dust that is measurable and above the PEL is required before chronic silicosis occurs.

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If Mr. Hill were my patient, I would not follow him for the subsequent development of silicosis, and I would assure him that he has no reason to worry about developing silicosis in the future.

I also found no evidence of any chronic condition with reference to his eyes or throat or skin.

I would point out that this man had recently injured his foot shooting baskets. If he really had the lung function suggested by the invalid spirometry, there is no way that he could be shooting baskets.

### **Conclusions**

My conclusions have been reached with a reasonable degree of medical certainty. I find no evidence of any chronic condition of the lungs or pulmonary system related to Mr. Hill's alleged exposures. I find no evidence of a chronic condition with reference to the skin, eyes or nose.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory J. Fino". The signature is fluid and cursive, with a long horizontal stroke at the end.

Gregory J. Fino, M.D., F.C.C.P.

GJF/kms

**CLINICAL AND OCCUPATIONAL PULMONARY ASSOCIATES****GREGORY J. FINO, M.D., F.C.C.P.****PREDICTED VALUES BASED ON THE 2005 SPIROMETRY RECOMMENDATIONS****Recommendations from the ATS/ERS : INTERPRETATIVE STRATEGIES FOR  
LUNG FUNCTION TESTS EUR RESPIR J 2005; 26:948-968.**

<b>Name</b>	Hill, Michael	<b>MD</b>	Fino	
<b>Ht</b>	172.7	cm	<b>Date</b>	1/3/2007
<b>Age</b>	49	years	<b>Race</b>	African American

**SPIROMETRY PREDICTED VALUES USING THE NHANES III STUDY****Spirometric Reference Values from a Sample of the General U.S. Population****AM J RESPIR CRIT CARE MED 1999; 159:179-187**

TEST	PATIENT	PRED	%PRED	LLN	LLN%	POST	%PRED	BD %	
<b>FVC</b>	3.49	3.92	89	3.03	77	3.75	96	7	
<b>FEV1</b>	2.10	3.14	67	2.36	75	2.76	88	31	
<b>FEV1/FVC</b>	60	80		70		74			
<b>FEF25-75</b>	1.55	3.19	49	1.51	47	2.57	81	66	

**REFERENCE VALUES FOR RV, FRC AND TLC - ATS WORKSHOP ON LUNG VOLUME  
MEASUREMENTS OFFICIAL STATEMENT OF THE EUROPEAN RESPIRATORY SOCIETY  
EUR RESPIR J 1995; 8:492-506**

L.V.	PATIENT	PRED	%PRED	LLN	LLN%	ULN	ULN%	
<b>TLC</b>	3.75	5.91	63	4.71	80	8.09	137	
<b>RV</b>	2.42	1.86	130	1.27	68	2.78	150	
<b>FRC</b>	2.84	3.03	94	2.16	71	4.43	146	
<b>RV/TLC%</b>	65	33	196	22	68	44	132	

**Prebronchodilator**

FVC  
FEV1  
FEV1/FVC  
FEF25-75

**Post Bronchodilator**

FVC  
FEV1  
Lung Volumes  
FRC N  
TLC 14V  
RV N  
RV/TLC 14V

**IMPRESSION**

PRE		POST	
<b>FVC</b>	3.49	<b>FVC</b>	3.75
<b>FEV1</b>	2.1	<b>FEV1</b>	2.76
<b>FEV1/FVC</b>	60	<b>FEF25-75</b>	2.57
<b>FEF25-75</b>	1.55	<b>PRE</b>	
<b>TLC</b>	3.75	<b>RV/TLC%</b>	65
<b>RV</b>	2.42		
<b>FRC</b>	2.84		

Gregory J. Fino, M.D.

**St. Clair Hospital**  
**Pulmonary Function Report**  
 1000 Bower Hill Rd.  
 Pittsburgh, PA, 15243

Phone: 412-942-2000 Fax: 412-942-2024

Name: Hill, Michael	ID: 882026	D.O.B.: 04/30/1957	Date: 01/03/2007
Tech: Diane Smith, CRT	Height: 68.00	Age: 49	Room: Out Patient
Doctor: G. Fino, M.D.	Weight: 170.00	Sex: Male	Race: Black

**Diagnosis:**

Dyspnea:

Cough:

Wheeze:

Tbco Prod:

Yrs Smk:

Pks/Day:

Yrs Quit:

**Medications:****Pre Test Comments:**

**Post Test Comments:** PFT Authors DLCO (Crapo), FVC (Nhanes III), FRC (ECCS) The results of this test are questionable due to the patient's inability to perform the maneuvers according to the ATS standards. Patient unable to complete DLCO testing Albuterol MDI 2 puffs given for post bronchodilator FVC.

	<b>Pre-Bronch</b>			<b>Post-Bronch</b>		
	<b><u>Actual</u></b>	<b><u>Pred</u></b>	<b><u>%Pred</u></b>	<b><u>Actual</u></b>	<b><u>%Pred</u></b>	<b><u>%Chng</u></b>
<b>--- SPIROMETRY ---</b>						
FVC (L)	3.49	4.34	80	3.75	86	7
FEV1 (L)	2.10	3.54	59	2.76	78	31
FEV1/FVC (%)	60	80	75	74	92	22
FEF 25% (L/sec)	1.41	7.36	19	3.82	52	170
FEF 75% (L/sec)	0.83	1.74	48	1.54	88	84
FEF 25-75% (L/sec)	1.55	3.70	42	2.57	69	66
FEF Max (L/sec)	2.12	8.53	25	3.83	45	80
FIVC (L)	2.85			2.52		-12
FIF Max (L/sec)	1.26			1.55		24
<b>--- LUNG VOLUMES ---</b>						
SVC (L)	1.32	4.65	28	2.67	57	102
IC (L)	0.91	3.26	28	1.83	56	102
ERV (L)	0.41	1.39	30	0.84	60	103
FRC (N2) (L)	2.84	3.30	86			
RV (N2) (L)	2.42	1.91	127			
TLC (N2) (L)	3.75	6.56	57			
RV/TLC (N2) (%)	65	29	223			
Washout Time (min)	5.49					



**St. Clair Hospital**  
**Pulmonary Function Report**

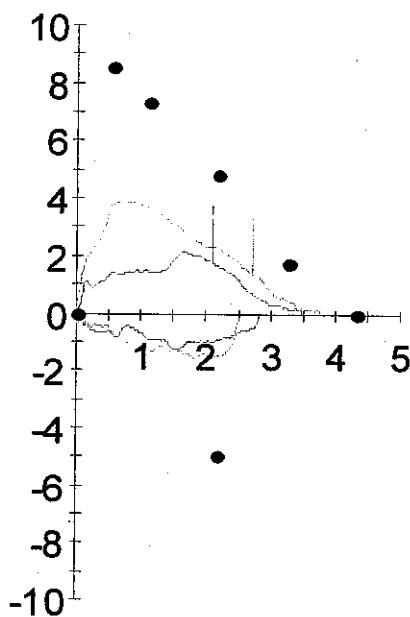
1000 Bower Hill Rd.

Pittsburgh, PA, 15243

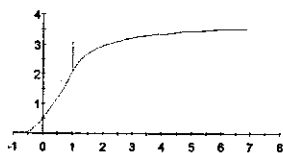
Phone: 412-942-2000

Fax: 412-942-2024

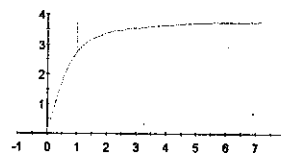
Name: Hill, Michael	ID: 882026	D.O.B.: 04/30/1957	Date: 01/03/2007
Tech: Diane Smith, CRT	Height: 68.00	Age: 49	Room: Out Patient
Doctor: G. Fino, M.D.	Weight: 170.00	Sex: Male	Race: Black



Pre



Post



E

# **St. Clair Hospital** **Pulmonary Function Report**

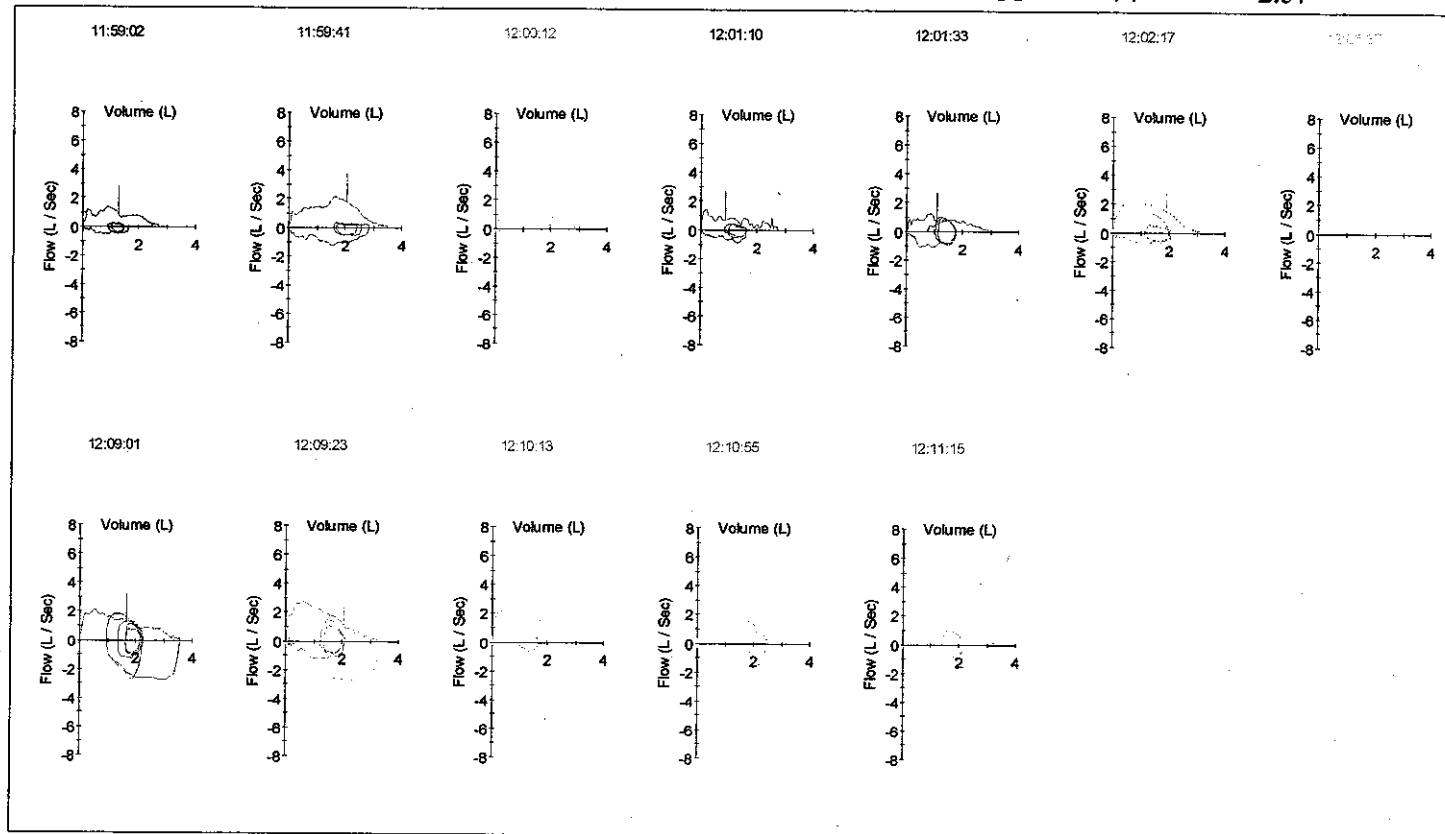
1000 Bower Hill Rd.

Pittsburgh, PA, 15243

Phone: 412-942-2000 Fax: 412-942-2024

Name: Hill, Michael	ID: 882026	D.O.B.: 04/30/1957	Date: 01/03/2007
Tech: Diane Smith, CRT	Height: 68.00	Age: 49	Room: Out Patient
Doctor: G. Fino, M.D.	Weight: 170.00	Sex: Male	Race: Black

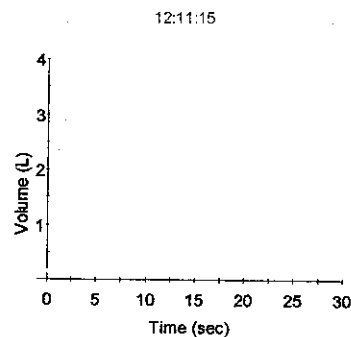
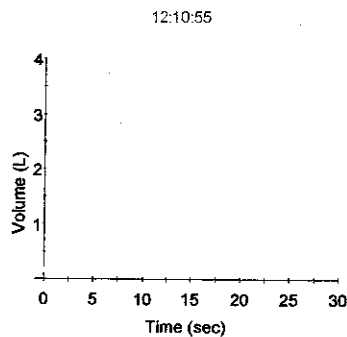
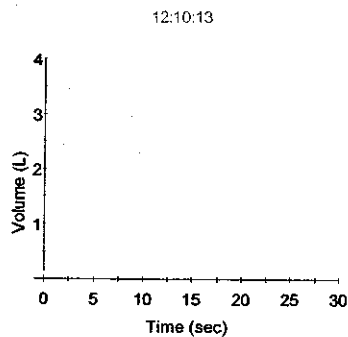
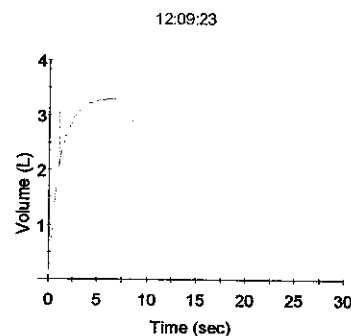
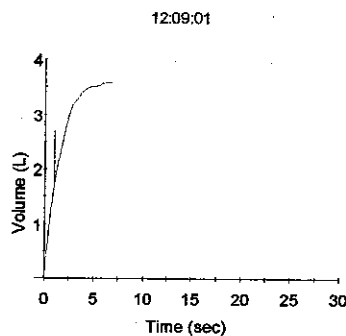
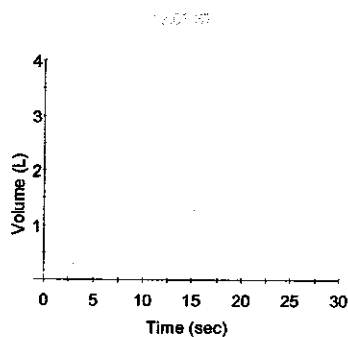
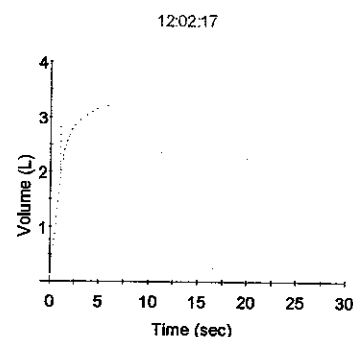
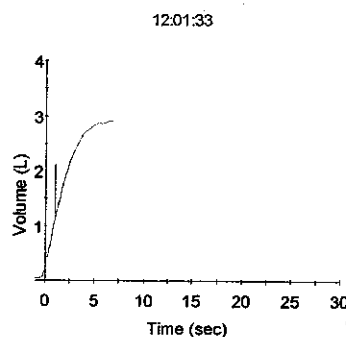
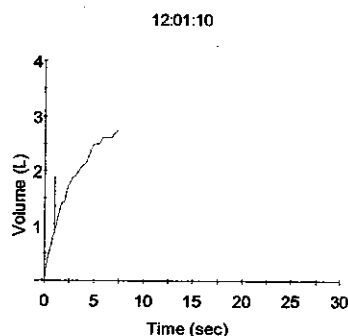
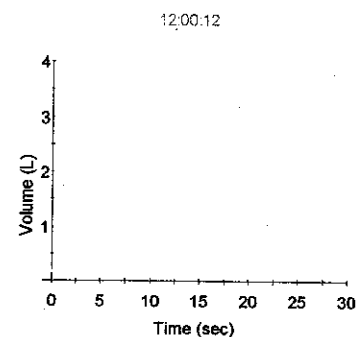
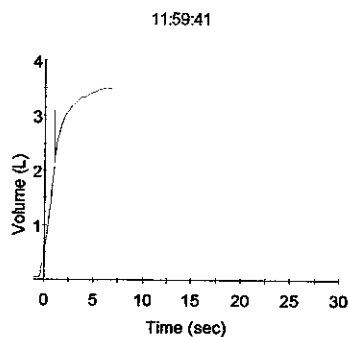
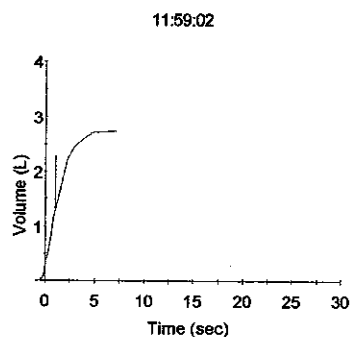
Time	Select	I-Lp	Test Mode	ATS	FVC absolute	FVC % p/c	FEV1 absolute	FEV1 % p/c	FEV1/FVC absolute	FEF 25-75% absolute
<b>Pre</b>										
11:59:41	*			back e	3.49	80	2.10	59	60	1.55
12:02:17	*				3.25	75	1.93	54	59	1.47
12:00:12	*			back e	2.92	67	1.65	47	57	1.26
12:01:33	*			back e	2.91	67	1.13	32	39	0.75
11:59:02	*			back e	2.74	63	1.31	37	48	0.89
12:01:10	*				2.74	63	0.90	25	33	0.47
Composite			Pre/Baseline		3.49	80	2.10	59	60	1.55
<b>Post</b>										
12:10:55	*				3.75	+7	2.76	+31	74	2.57
12:11:15	*				3.30	-5	2.26	+8	69	1.87
12:09:23	*				3.30	-6	2.08	-1	63	1.24
12:09:01	*				3.58	+2	1.69	-19	47	1.13
12:10:13	*				3.05	-13	1.74	-17	57	0.92
12:08:37	*				2.93	-16	1.56	-25	53	0.93
ATS			Post		3.75	+7	2.76	+31	74	2.57



**St. Clair Hospital**  
**Pulmonary Function Report**  
1000 Bower Hill Rd.  
Pittsburgh, PA, 15243

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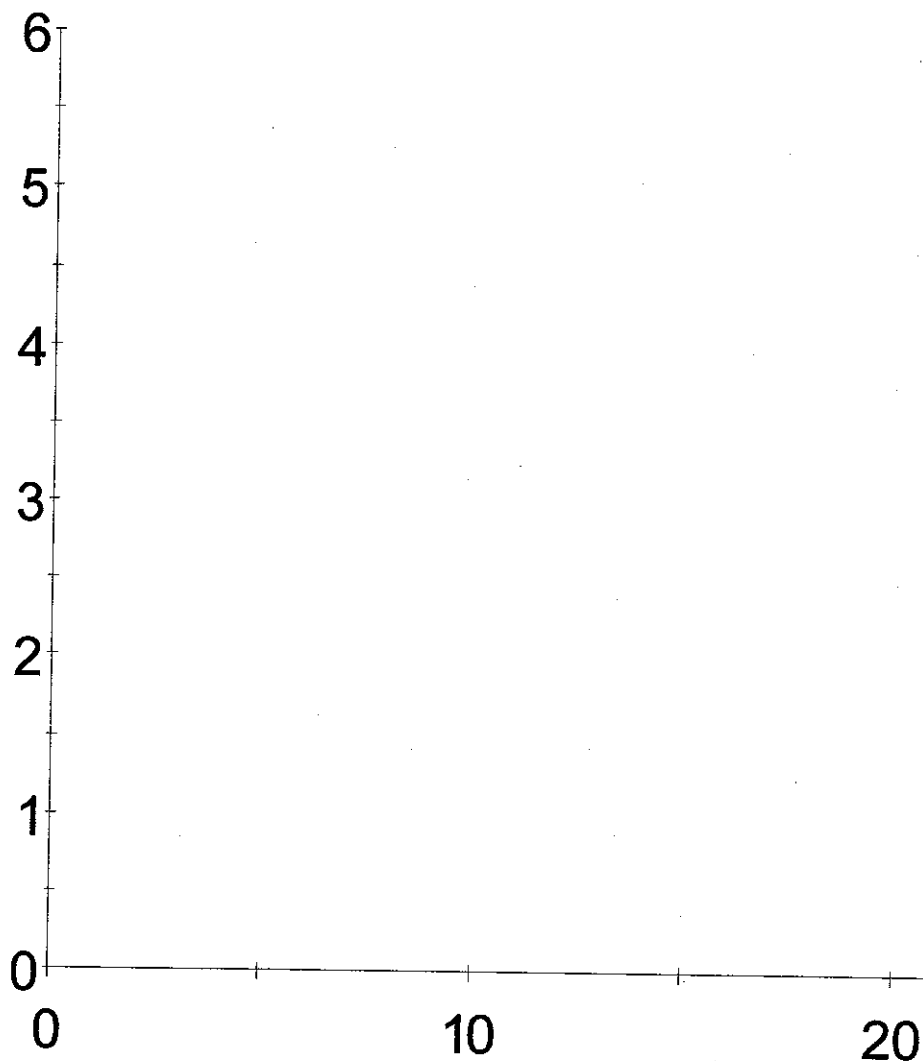


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Time	Select	RpLp	Test Mode	Codes	Protocol	DLCOunc absolute	DLCOunc % p/c	DLCOcor absolute	DLCOcor % p/c	DL/VA absolute
Predicted						29.64		34.22		5.41
Pre										
Post										
12:16:20					Inspirat Jones-Mea	24.95	??		??	5.32
AVG					Post		??		??	



**St. Clair Hospital****Pulmonary Function Report**

1000 Bower Hill Rd.

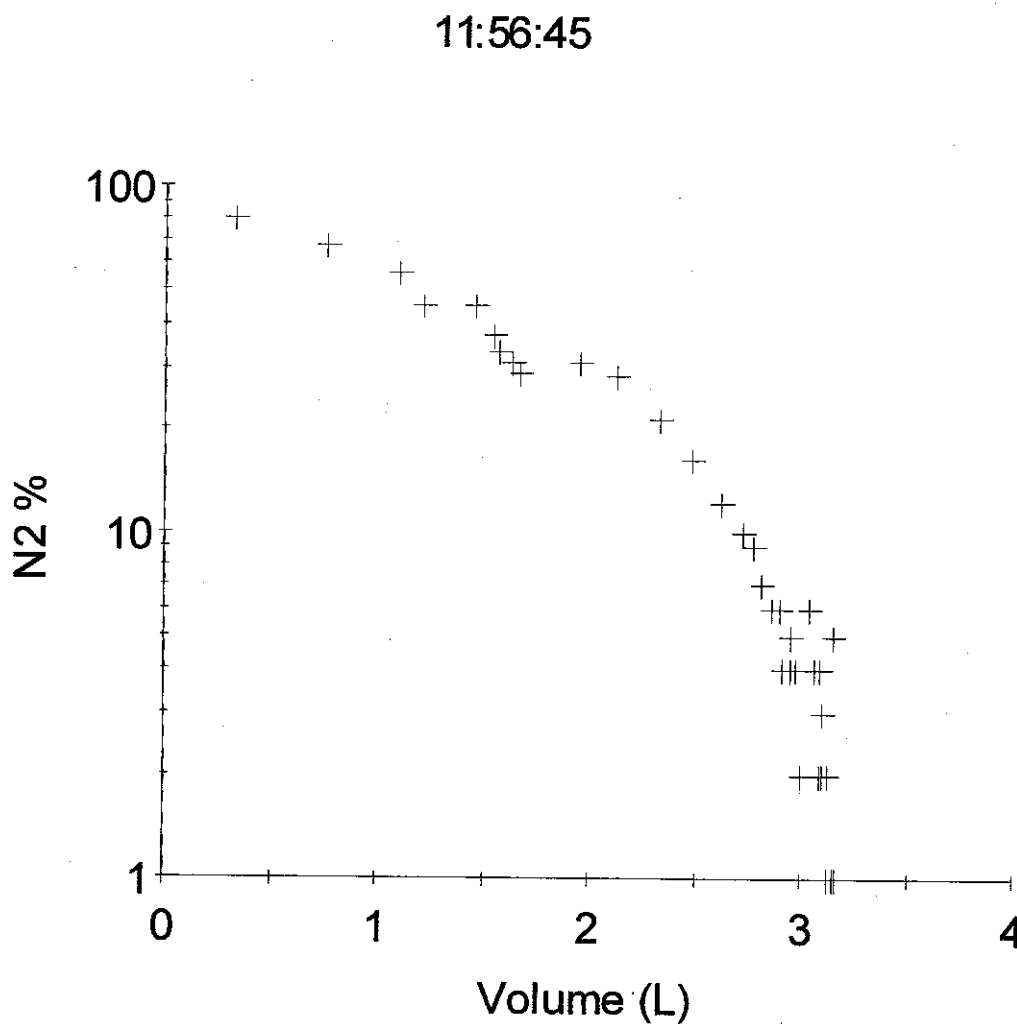
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Time	Select	RpLp	Test Mode	FRC (N2) absolute	FRC (N2) % p/c	RV (N2) absolute	RV (N2) % p/c	TLC (N2) absolute
Predicted				3.30		1.91		6.56
Pre								
11:49:53				17.15	520	16.74	876	18.06
11:56:45	*			2.84	86	2.42	127	3.75
AVG			Pre/Baseline	2.84	86	2.42	127	3.75
Post								



HILL, MICHAEL

MR#: 882026

SEX: M

AGE: 49Y

BIRTH: 04/30/1957

DOCTOR: FINO, GREGORY J., M.D.

1000 BOWER HILL RD.

SUITE 211

PITTSBURGH PA 15243

ST CLAIR HOSPITAL LABORATORY

1000 BOWER HILL ROAD

PITTSBURGH, PA 15243

MARTHA R. CLARKE, MD, MEDICAL DIRECTOR

===== PHYSICIAN COPY FOR DR: FINO, GREGORY J., M.D. =====

W6762 COLL: 01/03/2007 10:41 REC: 01/03/2007 10:44

## COMP METABOLIC

SGOT/AST	30	[0-50]	U/L
SGPT/ALT	19	[0-50]	U/L
ALKALINE PHOSPHAT	68	[43-122]	U/L
BILIRUBIN TOTAL	0.3	[0.2-1.3]	MG/DL
PROTEIN	7.6	[6.0-8.4]	G/DL
ALBUMIN	3.7	[3.5-5.0]	G/DL
CALCIUM	8.8	[8.0-10.2]	MG/DL
GLUCOSE	94	[70-110]	MG/DL
BUN	9	[8-25]	MG/DL
CREATININE	0.8	[0.6-1.5]	MG/DL
GFR (CAUCAS/OTHER)	>59	[>59]	ML/MIN
GFR (AFRICAN AMER)	>59	[>59]	ML/MIN
SODIUM	142	[133-145]	MMOL/L
POTASSIUM	4.0	[3.5-5.0]	MMOL/L
CHLORIDE	107	[96-108]	MMOL/L
CO2	29	[22-30]	MMOL/L
ANION GAP	@6	[8-16]	MMOL/L

## CBC HEMOGRAM

WBC	@2.5	[4.8-10.8]	K/UL
RBC	@4.63	[4.7-6.2]	M/UL
HEMOGLOBIN	@13.4	[14.0-17.0]	GM/DL
HEMATOCRIT	@38.8	[42.0-52.0]	%
MCV	83.9	[78.0-94.0]	FL
MCH	28.9	[25.0-35.0]	PG
MCHC	34.5	[31.0-36.5]	G/DL
RDW	13.4	[12.9-14.9]	%
PLATELET	151	[130-460]	K/UL
MPV	@7.2	[7.4-10.4]	FL

## DIFF, ELECTRONIC

ABSOLUTE NEUTROPH	@1.1	[1.5-6.6]	K/UL
ABSOLUTE LYMPHOCY	@1.3	[1.5-3.5]	K/UL
ABSOLUTE MONOCYTE	0.2	[0-0.9]	K/UL
ABSOLUTE EOSINOPH	0.1	[0-0.6]	K/UL
ABSOLUTE BASOPHIL	0.0	[0-0.1]	K/UL
NEUTROPHIL	42.2	[40-75]	%
LYMPHOCYTE	@47.6	[20-40]	%
MONOCYTE	7.5	[1-8]	%
EOSINOPHIL	2.4	[0-5]	%
BASOPHIL	0.2	[0-1]	%

PAGE: 1

1TIME

FINO, GREGORY J., M.D.

1000 BOWER HILL RD. SUITE 211

PITTSBURGH PA 15243

\* = CRITICAL VALUE

@ = OUTSIDE NORMAL RANGE

END OF REPORT

CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC

Gregory J. Fino, MD, FCCP

St. Clair Hospital  
1000 Bower Hill Road, Suite 211  
Pittsburgh, Pennsylvania 15243-1899

Telephone (412) 942-2025  
Fax (412) 942-2032  
Email gregory.fino@stclair.org

PATIENT HILL, MICHAEL

DATE 1-3-07

PULSE OXIMETRY

100% RA

CC = 3 ppm

0.6 COHb

**CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC**

---

Gregory J. Fino, MD, FCCP

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Telephone (412) 942-2025  
Fax (412) 942-2032  
Email gregory.fino@stclair.org

January 22, 2007

Michael C. Colville  
Assistant U.S. Attorney  
U.S. Department of Justice  
U.S. Post Office & Courthouse  
700 Grant Street  
Suite 4000  
Pittsburgh, PA 15219

**RE: Leslie Kelly v. United States**  
**C.A. No. 03-368E**  
**SSN: 363-90-8006**  
**DOB: 12/17/62**  
**OIME: 1/16/07**

Dear Attorney Colville:

I examined Mr. Kelly on January 16, 2007.

**Patient Profile**

Mr. Kelly was born in 1962 and was 44 years old.

His medications included:

1. Medication to control high cholesterol
2. One aspirin per day for his heart
3. Has used nasal spray "off and on" for "sores in my nose" - the last time was a couple of months ago

He has never used any inhalers for breathing.



Leslie Kelly  
January 22, 2007  
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He smoked 3-4 cigarettes per day from 1981 until about 2005, but he stopped on more than one occasion. He estimates that he smoked for about 18 years.

### **Occupational History**

Mr. Kelly worked at Unicor for about 9 months, from August of 2002 through April of 2003. He helped with the drilling of the Micore board and was ten feet from the cutting of the Micore board. Therefore, he was exposed to a lot of dust. He was also exposed to the dust from cutting particle board, and fumes from a glue used for the laminate - Lokweld. He was provided paper masks, but used them infrequently.

He denied any breathing problems prior to working at Unicor. He noticed breathing problems, nasal congestion and persistent headaches after he had been working there for about 6 months. He also noted some coughing. He noted pruritis and a rash on his hands. He also noted epistaxis.

Since he stopped working, the headaches are gone. He still has nosebleeds, and he still awakens at night breathless. He has also noted some spitting up of blood for the last couple of years.

### **Past Medical History**

1. Hospitalized for pneumonia as a child
2. Gunshot wound to right shoulder and another to his back - about 1986
3. Was told he was a "borderline" diabetic - about 1986
4. Has been on medication for cholesterol control since 2003
5. History of headaches in 2003 - initially on a daily basis, but infrequently now
6. Has been spitting up blood for about 2 years - occurs almost on a daily basis; he has had blood work done, but he does not know the results
7. Currently under evaluation for chest pain - has had a treadmill test
8. As noted above, he has problems sometimes "catching his breath" when he wakes up at night - has been evaluated, but diagnosis unknown.
9. Believes he has a history of sinus problems - often has a runny nose

He has no history of tuberculosis, emphysema, asthma, bronchitis, bronchiectasis, or frequent colds. There is no history of fractured ribs.

Leslie Kelly  
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### **Family History**

There is no family history of lung disease or malignancy. His mother had high blood pressure.

### **Review of Systems**

Neurologic:	No seizures
GI:	No history of chronic gastrointestinal disease
GU:	No chronic genitourinary problems
MS:	No chronic musculoskeletal problems
Endocrine:	No thyroid disease

### **Physical Examination**

General:	Well-developed, well-nourished African American man in no acute distress, oriented X 3
Heart Rate:	64
Blood Pressure:	119/70
Respiratory Rate:	14
Height:	70" without shoes
Weight:	192 lbs without shoes
Skin/Nails:	No cyanosis, clubbing, or edema. His skin was generally dry and I noted no rash.
Neck:	Supple with a midline trachea; no thyromegaly

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HEENT:	Unremarkable without abnormalities
Lungs:	Clear to auscultation and percussion on a tidal volume breath and a forced expiratory maneuver without wheezes, rales, rhonchi, or rubs
Heart:	Normal S1 and S2 without murmurs, gallops, or rubs
Abdomen:	No organomegaly
Peripheral Pulses:	2+ and equal
Extremities:	Negative
Edema:	Negative
Neurological Exam:	Intact

### **Chest X-Ray**

A two-view chest x-ray was performed in conjunction with this examination. The chest x-rays were compared to the revised 2000 ILO classification films.

I have also received for review the following radiographic studies, and I have compared all of the chest x-rays to the revised 2000 ILO classification films:

1. A Quality 3 AP portable film dated 5/24/04 performed at The Federal Transfer Center.
2. A Quality 3 AP portable film dated 8/20/04 performed at an unknown facility.

There were no pleural and no parenchymal abnormalities consistent with an occupationally acquired pneumoconiosis, and I classified all of the above-referenced chest x-rays as 0/0. There was evidence of metallic fragments over the right upper chest and right shoulder.

Leslie Kelly  
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### **Pulmonary Function Testing**

The American Thoracic Society, in conjunction with the European Respiratory Society, has published a follow-up article to their 1991 article on selection of reference values and interpretative strategies in pulmonary function testing.

The original 1991 article is entitled Lung Function Testing: Selection of Reference Values And Interpretative Strategies (AM REV RESPIR DIS 1991; 144:1202-1218). The more recent article is entitled Interpretative Strategies for Lung Function Tests (EUR RESPIR J 2005; 26:948-968).

The following consensus recommendations have been issued in the 2005 consensus statement:

- ✓ If the patient's age or height is outside the limits of the reference population, a statement in the interpretation should indicate that an extrapolation has been made.
- ✓ The practice of using 80% as a fixed value for the lower limit of normal can lead to important errors when interpreting lung function in adults. The practice of using 0.70 as a lower limit of the FEV1/FVC ratio results in a significant number of false positive results in males aged greater than 40 years and females greater than 50 years, as well as in a risk of over diagnosis of chronic obstructive pulmonary disease in asymptomatic elderly never smokers.
- ✓ Volume corrections should be made for African-Americans and Hispanics when measuring spirometry. Values for lung volumes are, on average, 12% lower in African-Americans than in Caucasians.
- ✓ Recommended spirometric reference equations come from the National Health and Nutrition Examination Survey (NHANES III) published in 1999 (AM J RESPIR CRIT CARE MED 1999; 159:179-187).
- ✓ Recommended lung volume reference equations were published in 1995 (EUR RESPIR J 1995; 8:492-506).
- ✓ A single set of diffusing capacity reference values could not be recommended. There were two commonly used equations referenced, one of which has been utilized since its publication in 1981 (AM REV RESPIR DIS; 123:185-189).

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The earlier consensus statement also recommended abandoning the 80% cut off as normal and the 70% cut off for the FEV1/FVC. The new 2005 statement paper goes one step further and has recommended utilization of one set of reference equations for spirometry, one for lung volumes and then one of two for the diffusing capacity. Having reviewed these new recommendations and having reviewed the source material, I believe that it is medically reasonable to follow the recommendations in the statement papers.

I have included with the pulmonary function studies that are performed in conjunction with my examinations a new summary for the spirometry, lung volumes and diffusing capacity. This summary utilizes the above noted recommendations for the spirometry, lung volume and diffusing capacity reference equations.

### **Spirometry**

Normal spirometry. He did not give a maximal effort; had he done so, the values would have been even higher.

### **Lung Volumes**

The lung volume study was technically invalid due to poor effort. The values are not accurate.

### **Diffusing Capacity**

The diffusing capacity was invalid because the inspiratory vital capacity was less than 90% of the forced vital capacity. However, when taking into consideration alveolar volume, the diffusing capacity was normal.

### **Oxygen Saturation**

Normal

### **Carboxyhemoglobin Level**

Normal

Leslie Kelly  
January 22, 2007  
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### **Laboratory Results**

Liver panel, renal panel, and a complete blood count were normal.

### **Medical Record Review**

In conjunction with this evaluation, I also reviewed the following records:

1. Background information which included:
  - The Microbac Indoor Airy Quality Survey dated 7/31/01.
  - The Declaration of Michael Salerno, dated 1/19/05, with detailed information regarding the ventilation system.
  - The McKean timeline, which identified when and where the Plaintiff worked within the UNICOR Factory.
  - Material Safety Data Sheets for Micore Board and Lokweld.
  - The OSHA Inspection Report and supporting documentation.

Micore Board is a man-made product which contains man-made vitreous fiber, expanded perlite, starch, recycled paper, kaolin and crystalline silica.

Lokweld is a sprayed grade adhesive used for laminate. It contains acetone, toluene, hexane isomers, and N-hexane.

In a letter dated August 20, 2003, Mr. Stranahan (from OSHA) discussed the results of air monitoring to evaluate worker exposures to airborne dust concentrations. He stated that the "results showed no worker's exposure exceeded 10% of the relevant exposure limit." He did recommend a number of steps that could be voluntarily taken to eliminate or further reduce the workers' exposure to dust. No respirable silica dust was measured.

2. A copy of the Amended Complaint.

Leslie Kelly  
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3. The Declaration of Eduardo F. Limonta, Health services Administrator, dated 5/2/05, with the Plaintiff's attached medical file through mid-April 2005.
4. The Declaration of Stephen Housler, Safety Manager, dated 5/9/05.
5. The Declarations of Martin Sapko, Factory Manager, dated 5/10/05 and 1/25/06.
6. The Declaration of Douglas S. Goldring, Assistant General Counsel, dated 1/27/06, including copies of the Plaintiff's medical file through January of 2006.
7. The Declaration of Debora Forsyth, Associate Warden, dated 1/30/06.
8. The transcript of Mr. Kelly's deposition dated 10/31/06.
9. In addition to the information noted above, I also had an opportunity to review miscellaneous records on CD ROMS that accompanied the files forwarded to my office.

### **Diagnosis**

Normal Pulmonary Examination

### **Discussion**

I find no evidence of a respiratory impairment or disability. This man's spirometry and diffusing capacity were both normal.

The determination of pulmonary impairment and subsequent disability has been extensively researched in the American medical literature. In the late 1980s, there was a worldwide conference on the assessment of respiratory impairment sponsored by the National Institutes of Health. This was published in the American Review of Respiratory Disease in 1988 (ARRD 1988; 137:1505-1510). All of the participants agreed that symptoms of shortness of breath on effort and exercise intolerance were not reliable predictors of impairment. There was also agreement that a physical examination was not helpful in measuring pulmonary impairment. Lung function tests, however, were essential in assessing whether or not impairment was present and essential in rating its severity. Dr. Hans Weill commented that "resting lung function tests, usually spirometry, all are the

Leslie Kelly  
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cornerstone in the clinician's assessment of respiratory impairment, and provided they are technically sound, are generally believed to be adequate for ascertaining the presence of respiratory limitation. Likewise, it is generally believed that exercise limitation is not likely to be present in the face of normal or marginal resting lung function."

Similar statements have been issued by the American Thoracic Society and the American Medical Association with respect to guidelines for the evaluation of respiratory impairment. It is of utmost importance that valid lung function studies be performed. An invalid study does not represent the patient's maximum pulmonary capacity and cannot be used to assess impairment or disability. An invalid pulmonary function study indicates poor patient effort. The values recorded can only represent the minimum lung function of the patient.

There is no evidence of either chronic or accelerated silicosis based on the normal chest films.

This patient should have no fear of contracting silicosis in the future. First of all, there were no measurable levels of respirable silica noted by OSHA. Furthermore, it is well documented in the medical literature that at least 20 years of exposure to dust that is measurable and above the PEL is required before chronic silicosis occurs.

If this were my patient, I would not follow Mr. Kelly for the subsequent development of silicosis, and I would assure him that he has no reason to worry about developing silicosis in the future.

I find no evidence of any chronic condition with reference to his eyes or throat or skin.

### **Conclusions**

My conclusions have been reached with a reasonable degree of medical certainty. I find no evidence of any chronic condition of the lungs or pulmonary system related to his alleged exposures. I find no evidence of a chronic condition with reference to the skin, eyes or nose.

Sincerely,



Gregory J. Fino, M.D., F.C.C.P.

GJF/kms



# CLINICAL AND OCCUPATIONAL PULMONARY ASSOCIATES

GREGORY J. FINO, M.D., F.C.C.P.

## PREDICTED VALUES BASED ON THE 2005 SPIROMETRY RECOMMENDATIONS

Recommendations from the ATS/ERS : INTERPRETATIVE STRATEGIES FOR  
LUNG FUNCTION TESTS EUR RESPIR J 2005; 26:948-968.

Name	Kelly, Leslie		MD	Fino	
Ht	177.8	cm	Date	1/16/2007	
Age	44	years	Race	African American	

## SPIROMETRY PREDICTED VALUES USING THE NHANES III STUDY

Spirometric Reference Values from a Sample of the General U.S. Population

AM J RESPIR CRIT CARE MED 1999; 159:179-187

TEST	PATIENT	PRED	%PRED	LLN	LLN%
FVC	4.10	4.31	95	3.37	78
FEV1	3.38	3.50	97	2.66	76
FEV1/FVC	82	81		71	
FEF25-75	3.91	3.59	109	1.81	50

## REFERENCE VALUES FOR RV, FRC AND TLC - ATS WORKSHOP ON LUNG VOLUME MEASUREMENTS OFFICIAL STATEMENT OF THE EUROPEAN RESPIRATORY SOCIETY

EUR RESPIR J 1995; 8:492-506

L.V.	PATIENT	PRED	%PRED	LLN	LLN%	ULN	ULN%
TLC	7.65	6.27	122	5.07	81	8.50	135
RV	3.47	1.82	191	1.23	68	2.74	150
FRC	4.95	3.09	160	2.22	72	4.50	146
RV/TLC%	45	31	144	20	66	42	134

## STANDARDIZED SINGLE BREATH NORMAL VALUES FOR THE DLCO

AM REV RESPIR DIS 1981;123:185-189

DLCO	PATIENT	PRED	%PRED	LLN	LLN%
DLCO	24.31	33.43	73	26.21	78
DL/VA	4.27	4.91	87	3.68	75

### Prebronchodilator

FVC  
FEV1  
FEV1/FVC  
FEF25-75

NORMAL

### Diffusing Capacity

DLCO - INVALID  
DL/VA - NORMAL

### IMPRESSION

### Lung Volumes

FRC  
TLC  
RV  
RV/TLC

INVALID

PRE			
FVC	4.1		
FEV1	3.38		
FEV1/FVC	82		
FEF25-75	3.91		
TLC	7.65	RV/TLC%	45
RV	3.47	DLCO	24.31
FRC	4.95	DL/VA	4.27

Gregory J. Fino, M.D.

**St. Clair Hospital**  
**Pulmonary Function Report**

1000 Bower Hill Rd.  
Pittsburgh, PA, 15243

Phone: 412-942-2000 Fax: 412-942-2024

Name: Kelly, Leslie	ID: 882590	D.O.B.: 12/17/1962	Date: 01/16/2007
Tech: T. Zeman, CRT, RPsgT.	Height: 70.00	Age: 44	Room: Outpatient
Doctor: G. Fino, M.D.	Weight: 192.00	Sex: Male	Race: Black

Diagnosis: SOB

Dyspnea: After severe exertion

Cough: Productive

Wheeze: No Wheeze

Tbco Prod: Cigarette

Yrs Smk: 18.0

Pks/Day: 0.3

Yrs Quit: 2.0

Medications:

Pre Test Comments:

Post Test Comments: Good patient effort and cooperation Patient met ATS standards. PFT Authors DLCO (Crapo), FVC (Nhanes III), FRC (ECCS)

	<b>Pre-Bronch</b>			<b>Post-Bronch</b>		
	<b><u>Actual</u></b>	<b><u>Pred</u></b>	<b><u>%Pred</u></b>	<b><u>Actual</u></b>	<b><u>%Pred</u></b>	<b><u>%Chng</u></b>
<b>---- SPIROMETRY ----</b>						
FVC (L)	4.10	4.31	95			
FEV1 (L)	3.38	3.50	97			
FEV1/FVC (%)	82	81	102			
FEF 25% (L/sec)	4.70	7.92	59			
FEF 75% (L/sec)	1.72	2.02	85			
FEF 25-75% (L/sec)	3.91	3.59	109			
FEF Max (L/sec)	6.13	9.07	68			
FIVC (L)	2.72					
FIF Max (L/sec)	2.66					
<b>---- LUNG VOLUMES ----</b>						
SVC (L)	4.18	5.03	83			
IC (L)	2.70	3.44	78			
ERV (L)	1.48	1.59	93			
FRC (N2) (L)	4.95	3.47	143			
RV (N2) (L)	3.47	2.07	168			
TLC (N2) (L)	7.65	7.13	107			
RV/TLC (N2) (%)	45	31	146			
Washout Time (min)	2.47					
<b>---- DIFFUSION ----</b>						
DLCOunc (ml/min/mmHg)	24.31	37.99	64			
DLCOcor (ml/min/mmHg)		37.35				
DL/VA (ml/min/mmHg/L)	4.27	5.58	77			
VA (L)	5.69	6.94	82			
IVC (L)	3.91					
BHT (sec)						